## Self-acting Safety Regulator and Coal Economiser. 125

In preparing the necessary drawings for these abstracts the photo-lithographic process has been resorted to, by which a great saving of expense is effected. Since the use of photolithography by the Victorian Government to illustrate patent publications, the same method has been similarly adopted by the Washington office, and, it is said, with the most satisfactory results.

> ART. XXXVII.—On Meat Preserving. Contributed by ROBERT CALDWELL, ESQ. [Read 8th April, 1872.]

In this paper was described the process of Meat Preserving adopted by the Melbourne Meat Preserving Company, and some improvements recommended by Mr. Caldwell.

ART. XXXVIII.—On Biangular Co-ordinates. Contributed by PATRICK FORD, Esq., M.A. [Presented 8th April, 1873.]

## ART. XXXIX.—Self-acting Safety Regulator and Coal Economiser for Steam Engines. By F. POOLMAN, Esq.

## [Read 13th May, 1872.]

The frequency of steam boiler explosions in Melbourne and on the gold-fields, induces me to lay before you the following paper, descriptive of an apparatus invented and patented by me in April 1863, for the prevention of explosions from careless firing, and for the saving of fuel; requiring less skill and labour from the fireman.

It is called a Self-acting Safety Regulator and Coal Economiser.

The apparatus has the extreme of simplicity to recommend itself, is very inexpensive, costing only a few shillings per horse-power of steam boiler; can be manufactured by any ordinary blacksmith; and in practice, is found to cost